

20 dB Fixed Attenuator SMP Male (Plug) to SMP Female (Jack) Up to 18 GHz Rated to 1 Watt, Stainless Steel Body, 1.35:1 VSWR

Fairview Microwave carries a broad selection of fixed attenuators with a wide range of attenuation levels, frequency ranges, and power dissipation ranges. Also known as RF pads, RF microwave attenuators lower the amplitude of a signal (or attenuate) a known amount. These attenuator pads can be used in a wide variety of applications including reducing a signal level to protect measurement equipment or other circuitry, extending the range of power meters and amplifiers, and impedance matching circuits by reducing the VSWR seen by adjacent components. RF attenuators can prevent signal overload in amplifiers, receivers and detectors, adjusting the signal level to a range that is optimal.

Few RF components are as commonly used as fixed coaxial attenuators, and Fairview Microwave carries one of the largest in-stock varieties and ships them same day. The FMAT7470-20 is a 20 dB Fixed Attenuator that operates from DC to 18 GHz and is rated to 1 Watt. The versatile coaxial package uses SMP male to SMP female connectors.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		0.8		dB
VSWR			1.35:1	
Input Power, CW average to 25°C ambient temperature, derated linearly to 0.5W @ 125°C.			1	Watt
Input Power, Peak 5µs pulse, 1% duty cycle			100	Watts

Mechanical Specifications

Size	
Length	0.835 in [21.21 mm]
Width/Diameter	0.315 in [8 mm]
Height	0.315 in [8 mm]
Weight	0.011 lbs [4.99 g]
Body Material and Plating	Stainless Steel

Configuration

Design	Fixed, Bidirectional
Package Style	Connectorized Module

Connectors

Description	Connector 1	Connector 2
Type	SMP Male	SMP Female
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Material & Plating	Stainless Steel	Stainless Steel



Features:

- DC to 18 GHz Frequency Range
- SMP Connectorized Design
- Attenuation 20 dB ±0.8 dB
- Max Power 1 Watt (CW)
- Max VSWR of 1.35:1

Applications:

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems

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Environmental Specifications

Temperature

Operating Range -55 to +125 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

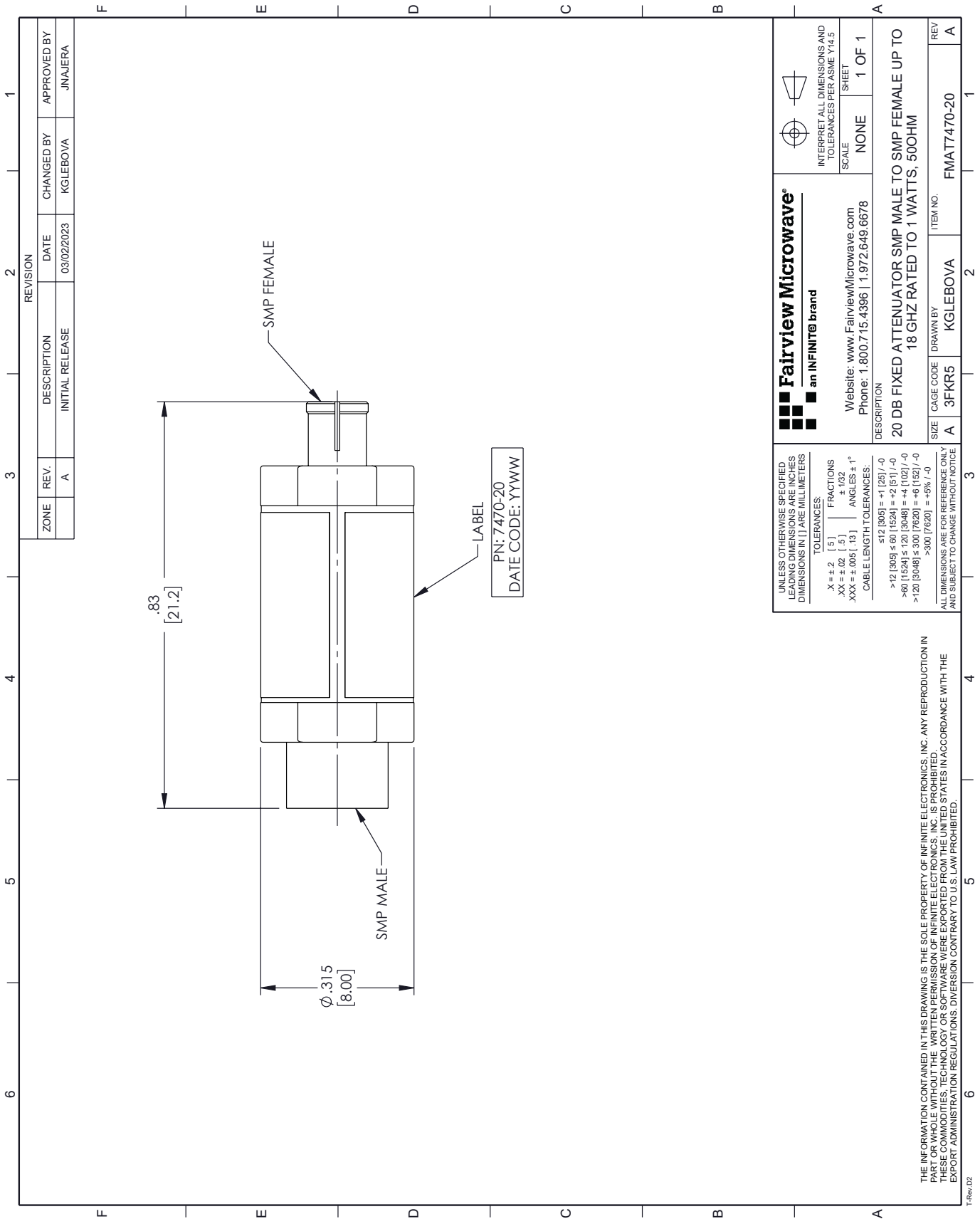
Notes:

20 dB Fixed Attenuator SMP Male (Plug) to SMP Female (Jack) Up to 18 GHz Rated to 1 Watt, Stainless Steel Body, 1.35:1 VSWR from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [20 dB Fixed Attenuator SMP Male \(Plug\) to SMP Female \(Jack\) Up to 18 GHz Rated to 1 Watt, Stainless Steel Body, 1.35:1 VSWR FMAT7470-20](#)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-male-female-1-watt-fmat7470-20-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



REVISION			
ZONE	REV.	DESCRIPTION	DATE
	A	INITIAL RELEASE	03/02/2023

CHANGED BY	APPROVED BY
KGLEBOVA	JINAJERA

Fairview Microwave
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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION:
20 DB FIXED ATTENUATOR SMP MALE TO SMP FEMALE UP TO 18 GHZ RATED TO 1 WATTS, 500HM

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	KGLEBOVA	FMAT7470-20

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE INCHES, DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [.5] FRACTIONS
 .XX = ±.02 [.5] ±.132
 .XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 ≤12 [305] = +1 [25] / -0
 >12 [305] ≤ 60 [1524] = +2 [51] / -0
 >60 [1524] ≤ 120 [3048] = +4 [102] / -0
 >120 [3048] ≤ 300 [7620] = +6 [152] / -0
 >300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.

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